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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,392	06/28/2007	Thomas N. Horsky	211843-00044	3848

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KATTEN MUCHIN ROSENMAN LLP
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WASHINGTON, DC 20007-5118

EXAMINER

SOUW, BERNARD E

ART UNIT	PAPER NUMBER
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2881

MAIL DATE	DELIVERY MODE
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03/10/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,392	Applicant(s) HORSKY ET AL.	
	Examiner BERNARD E. SOUW	Art Unit 2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/07/2008 (Amdt).
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 70-137 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 102 and 130 is/are rejected.
- 7) ☒ Claim(s) 70-101, 103-129 and 131-137 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/12/08, 10/21/08, 4/22/08 and 3/20/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Petition Granted

1. The petition filed by Applicant on 10/07/2008 under §1.137 (b) has been granted on 01/23/2009.

Consequently, the prosecution of this application is continued.

Information Disclosure Statement

2. Receipt is acknowledged of information disclosure statement (IDS) submitted on 10/21/2008, 04/22/2008, 12/12/2008 and 03/20/2008. The submission is in compliance with the provisions of 37 CFR 1.97.

Signed copies of the information disclosure statements are here enclosed.

Amendment

3. The Amendment filed on 10/07/2008 has been entered. The present Office Action is made with all the suggested amendments being fully considered.

Claims 2-69 have been previously cancelled.

No new claim has been added.

Claims 1 and 70-137 are pending in this Office Action.

Terminal Disclaimer

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4. The terminal disclaimers filed on 10/07/2008 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration dates of US Patent Application No.11/647,898 and 11/647,719 have been reviewed and are accepted. The terminal disclaimers have been recorded.

Double Patenting

Provisional Double Patenting Withdrawn

5. An obviousness-type provisional Double Patenting rejection of claim 1 and claim 102 over claim 1 of copending Application No. 11/647,898 (USPGPub 2007/0241689) is now withdrawn based on the Terminal Disclaimer filed 12/22/2008.

6. Another obviousness-type provisional Double Patenting rejection of claim 130 over claim 1 of copending Application No. 11/647,719 (USPGPub 7/0108395) is now withdrawn based on the Terminal Disclaimer filed 12/22/2008.

Non-Statutory Type Double Patenting Required

7. Claims 1 and 102 **stand** rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent **Application No. 11/647,714** (USPGPub 2008/0121811). Although the conflicting claims are not identical, they are not patentably distinct from each other because the present claim is an obvious variation of the reference claim:

► The ion source and its accessories are the same as those of the reference application.

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- ▶ The extraction electrode is also the same as that of the reference application.
- ▶ The reactive gas cleaning system is also the same as that of the reference application.
- ▶ The additional limitation in the present claim regarding the surface of the ion source being susceptible to contamination deposits is not a true limitation, but only a “dummy” limitation that represents a general condition well known in the art that does not further limit the claim, since, if the surface of the ion source is not susceptible to contamination, there would be no contamination and no cleaning needed, so the claim would not make any sense and/or the entire claim would cease to exist.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claims 130 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent Application No. 11/452,003 (USPGPub 2006/027). Although the conflicting claims are not identical, they are not patentably distinct from each other because the present claim is an obvious variation of the reference claim:

- ▶ The extraction electrode is the same as that of the reference application.
- ▶ The limitations regarding its temperature are also the same.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Indication of Allowable Subject Matter

9. Claims 1 and 102 would be allowable upon submitting a Terminal Disclaimer over US Applications SN 11/647,714.
10. Claim 130 would be allowable upon submitting a Terminal Disclaimer over US Applications SN 11/452,003.
11. Claims 70-101, 103-129 and 131-137 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for Allowable Subject Matter

12. The following is an examiner's statement of reasons for allowable subject matter:

Claims 1 and 102 contain allowable subject matter for reciting a system for generating an ion beam comprising an ion source in combination with an extraction electrode and a reactive gas cleaning system, the ion source comprising an ionization chamber maintained at a high voltage and having an inlet for gaseous or vaporized feed materials, an ionizing system for ionizing the feed material within the ionization chamber, and an extraction aperture that communicates with a vacuum housing that is evacuated by a vacuum pumping system, the extraction electrode disposed in the vacuum housing outside of the ionization chamber, aligned with the extraction aperture and adapted to be maintained at a voltage below that of the ionization chamber to extract ions through the aperture, and the reactive gas cleaning system operable when

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the ionization chamber and ionizing system are de-energized to provide a flow of reactive gas through the ionization chamber and through the ion extraction aperture to react with the deposits, and thus removing the deposits from at least some of the surfaces of the ion generating system.

13. Claim 130 contains allowable subject matter for reciting an ion implantation system comprising an ion source and an extraction electrode associated with an electrical heater that is adapted to keep the extraction electrode temperature elevated above the condensation temperature of gaseous or vaporous material leaving the ion source.

14. Claims 70-101, 103-129 and 131-137 also contain allowable subject matter due to their dependency, either directly or indirectly, to the previously allowable claim 1.

Final Rejection

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP §706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and

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any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Communications

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard E Souw, whose telephone number is 571 272 2482. The examiner can normally be reached on Monday thru Friday, 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on 571 272 2293. The central fax phone number for the organization where this application or proceeding is assigned is 571 273 8300 for regular communications as well as for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571 272 5993.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Bernard E Souw/
Examiner, Art Unit 2881

11/26/2008